Date: Mon, 11 Apr 94 16:41:26 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V94 #405
To: Info-Hams

Info-Hams Digest Mon, 11 Apr 94 Volume 94 : Issue 405

Today's Topics:

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 11 Apr 94 19:49:27 GMT
From: hp-cv!hp-pcd!hpcvsnz!tomb@hplabs.hp.com
Subject: Any experience with doppler rdf (radio direction finders)?
To: info-hams@ucsd.edu

Philip Kahn (pkahn@Csli.Stanford.EDU) wrote:
: I have been reading up on doppler RDF's. The Amateur Radio Handbook
: has an article that says they can only do well to about 5 degrees.
: Have you heard of systems or ways to do it that gives better results?

I've been using the "Dopplescant" described in May 78 QST for about
that long, off and on, and have a couple comments kind of tangent
to what Gary C. noted in another followup:

First, though you can build a doppler system that accurately reads apparent direction with better than 5 degree accuracy, I see little point, at least for the typical bunny hunt where the RDF receiver system is mobile (vehicle or on foot). Multipath makes it quite unlikely that better than 5 degree accuracy at the receiver is worthwhile, and the mobility means that in practice, you move toward the bunny and simply don't worry about small errors.

Second, though you can undoubtedly achieve high accuracy with careful construction, another way that should be as applicable to doppler antennas as to many other areas is calibration. For a given system, if you understand how the errors will affect the readings and calibrate often enough and at enough points (which could be one thorough calibration and an occasional single-point check), you can get the errors quite low. You can't resolve ambiguities that way, so the raw (uncorrected) output has to have an appropriate d(out)/d(theta) at all angles.

Finally, for best results, use equipment with adequate basic performance, and spend some time learning to use it under a variety of conditions. You will find that the best results are obtained by using multiple techniques and using your head to understand what the several sensors are telling you.

73, K7ITM

Date: 11 Apr 94 18:31:55 GMT
From: agate!dog.ee.lbl.gov!ihnp4.ucsd.edu!sdd.hp.com!hpscit.sc.hp.com!
hpuerci.atl.hp.com!hpuerca!edh@ucbvax.berkeley.edu
Subject: Anyone Bicycle Mobile?
To: info-hams@ucsd.edu

Okay, first, I didn't do the riding (my wife, Dawn-KI5EV, and son Ryan-N5SVU are the long distance riders); second, your milage may vary :-)

For two years running when we were back in TX my wife and son rode the MS-150 (100 miles day 1, 76 day 2, from Houston to Austin). For the event and (of course) for the practice sessions leading up to it, we wanted to have good comm from them bicycle mobile to me (home, car, or playground with the younger two kiddos). So . . .

Equipment: (besides the bike :-)

-handlebar bag; zipper main compartments, elastic mesh side pockets, clear vinyl top flap (for map), velcro straps for easy on/off and metal top (wire)

frame to hold it up and rigid on the bike. Models from any bike shop.
-DJ-580 from Alinco, because it was rugged, small, light, has features for power conservation, dual-band flexability, and it was the right price. The 580 fits snugly into an outer pocket of the bag. With a little fiddling around you can find a place where you can see the display (if you really need to). The combination of the bag, the wire frame, and the handlebars will protect the radio in case of a fall (I'm more worried about the rider:-)
-Thinline 50 ohm mini-coax with BNC connectors. One end goes to DJ-580 and (obvious?) other to bottom of antenna. I used nylon cable tiewraps to hold the cable to the top tube of the bikes (and out of the way of everything else, like the spare brake and shifter cables we ran in tandem to the "real" cables: makes for an easy road-fix).
-Antennas. Most used was a simple 1/4 GP that I made using the back luggage rack as the ground plane. My wife found it a little annoying when getting on and off the bike, and it prevented her from putting _everything_ she wanted on the rack (but most folks don't seem to run racks at all, so...). Tried a simple wire jpole on a bike flag (was going to make it "nicer" later). Worked like a champ, but was a _lot_ more annoying when getting on/off: wife and son nixed the idea on aesthetics (nobody else on MS-150 would _dream_ of riding with bicycle flags!). Sometimes they would just use the rubber duck on the h/t (or the ANLI dual-bander: much better). _I_ preferred them to use the 1/4: I could hear them much better over that hilly route. The 19 inch is not all that conspicuous, but works pretty well.
-Microphones. My wife ended up with the Alinco earbud with small VOX mic. It also has a PTT mode which my wife switched to pretty often as she didn't want everybody hearing her panting all the time :-) My son switched around between a single-side headphone with boom mic (PTT) and a label-clip PTT speaker-mic (he really wanted one like my wife's, but money got tight). The headset/boom mic definately worked better than the speaker-mic and is still the setup I use in casual bicycle riding. The earbud setup my wife like is a good one. We've not had the opportunity to try earmics.
-Power. Besides the regular battery packs, they used shell packs for regular alcalines and RC car battery packs. The RC packs slipped into another mesh pocket on the handlebar bag (or into shorts pockets when walking around) and were wired for the external dc-in jack. They worked great and we got a deal on buying them that made them _much_ cheaper than regular packs.
-Frequencies. Since I was doing comm support, we had the net freqs programmed into the radios (and my wife had the opportunity to call in some downed bikers before the roving vehicles got there). We had a simplex freq for bike-to-bike and bike-to-me comm. At times, we got other riders involved which made the ride nicer for all concerned.

Vibration was not a problem with the handllebar bags. We had paid to have an aluminum h/t holder made for the bike, but it looked like it would be more trouble than it was worth--never used it. I still feel like the jpole bike flag would be a good option if you didn't mind the obvious bicycle-nerd look (no-flames please, I'm quoting). The earbud as opposed to the headset is more comfortable. In either case, wires must be long enough to reach

easily to be connected to the h/t and allow complete freedom of movement
without dangling down in the way while riding over the handlebars.

Our objective was good comm without getting in the way of the bicycle ride.
The prime goal was the MS-150 after all. We felt like we succeeded and we
would duplicate the setup if we ever get around to trying the GA 150.

Cheers, 73, and good luck going bike-mobile!
Ed Humphries - N5RCK Hewlett Packard Atlanta GA

Date: 11 Apr 94 19:42:56 GMT
From: sdd.hp.com!col.hp.com!srgenprp!alanb@hplabs.hp.com
Subject: Anyone Bicycle Mobile?
To: info-hams@ucsd.edu

Michael Malloy (mmjjmm@post.its.mcw.edu) wrote:
: I hope to be bicycle mobile on 2 meters this summer. Any suggestions on
: equipment and antennas would be most welcome.

I tried mounting the HT (handheld transceiver) to the handlebars. I used
some kind of clamp from my "bicycle junkbox" (I think it was a generator
mount) and just used the HT's belt clip to attach it. It made a good
secure connection, but I was worried about the vibration's affect on
radio reliability. (I do a lot of riding on bumpy roads).

Now I just use the low-tech solution of just clipping the HT to my belt.
(Admittedlty a bit difficult if you wear Lycra!) The only problem is
I have to turn up the volume, which can annoy other riders. I think
a speaker mic clipped to my shirt collar would solve that problem.

AL N1AL

Date: 11 Apr 94 17:59:05 GMT
From: sdd.hp.com!col.hp.com!fc.hp.com!jayk@hplabs.hp.com
Subject: C91J QSL Info
To: info-hams@ucsd.edu

Darrell Earnshaw (dearnshaw@worldbank.org) wrote:
: In article <Cnr80I.nF@usna.navy.mil> m970984@usna.navy.mil (MIDN Vasily
: Chistiakov (M970984)) writes:
: >
: >Does anyone know who the QSL manager for C91J is? Thanks
: >
: Try W8GIO - he handles cards for a lot of C9 stations. I heard rumor that he

: will be relinquishing this post soon, so send the card before too long!
: Good Luck, Darrell

I think C91J was C9RJJ before they reworked the call system in C9.
I got cards for C9RJJ from W8GIO.

73, Jay K0GU   jayk@fc.hp.com

Date: 11 Apr 94 20:50:32 GMT
From: news-mail-gateway@ucsd.edu
Subject: Delivery Failure Report
To: info-hams@ucsd.edu

From: NAME: Mail Postmaster
     FUNC:
     TEL: <POSTMASTER AT A1 AT ANDV02>
To: net%"Info-Hams@UCSD.EDU"@RCVAX@MRGATE

    ALL-IN-1 was unable to deliver your message dated   to
      ADAMS,SE   - no such ALL-IN-1 account
    on node ANDV02

    The subject of the message was :
      Info-Hams Digest V94 #404

Date: 11 Apr 1994 19:54:28 GMT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!pipex!uknet!EU.net!news.funet.fi!
nntp.hut.fi!vipunen.hut.fi!jsi@network.ucsd.edu
Subject: EME Programs
To: info-hams@ucsd.edu

>In response to the recent request for leads to PC programs helpful to EME
>operators, may I suggest "SKYMOON" by W5HN. While I don't operate EME, I've
>seen Dave use it a few times and it looks very nice. The fact that W5HN has
>the first DXCC on 144 MHz shows it con't be TOO bad.
>73 de Bob w3otc@amsat.org

 Is anyone out there using this program ? What are the main features ?
 Is it worth the money while there are free programs available, like
 VK3UM's EME TRAK ?

 Jukka oh6dd

Date: 11 Apr 94 19:48:17 GMT
From: sdd.hp.com!col.hp.com!srgenprp!alanb@hplabs.hp.com
Subject: how's FM broadcast for freq. standard?
To: info-hams@ucsd.edu

ajbutler@ins.infonet.net (ajbutler@ins.infonet.net) wrote:
: In article <CnyGzK.7o8@srgenprp.sr.hp.com>, alanb@sr.hp.com (Alan Bloom) writes:

: >Why not call up the broadcast station and ask them? Ask to speak to the
: >chief engineer.

: The standard for FM Broadcast is a fairly wide standard. If you want to use
: something for a standard try an AM broadcast station. They are required to be
: inside of 20 Hz limits above and below their assigned channel. I believe the
: FM stations are allowed several Kilohertz of deviation.

I didn't post the numbers, because my data may be years out of date, but
it USED to be 20 Hz for AM and 2 kHz for FM. I remember because it's almost
exactly the same percentage accuracy (about 20 ppm).

But I expect that most modern broadcast stations are much better than the
requirement nowdays.

AL N1AL

Date: 11 Apr 94 23:05:20 GMT
From: hp-cv!hp-pcd!hpcvsnz!tomb@hplabs.hp.com
Subject: how's FM broadcast for freq. standard?
To: info-hams@ucsd.edu

Scott Dorsey (kludge@netcom.com) wrote:

: Most of the stations out here in rural VA don't have engineers on-staff
: any longer, and they only fix things when they become catastrophically
: broken. This does not tend to result in the best quality signal making
: it out over the air.

Pardon the drift, but as the following story illustrates, this has been
going on for longer than deregulation.

A bit over 20 years ago, I was stationed at a Naval outpost in the Aleutians.
A friend build a stereo receiver from a kit, and aligned it according to
instructions. He complained of distortion on the only FM signal on the
island. He asked me to have a look at it. I went through the alignment

again, and everything was right on, and for a non-electronics type, he had done a wonderful job putting the thing together. But closer inspection revealed rather high modulation by the station. I could even see it on a triggered scope on the IF, when the stereo pilot tone was the only modulation. Using a spectrum analyzer and figuring with Bessel functions, we found the pilot tone at about 50% of full deviation: way, way over what it was supposed to be. Best we could tell, it was in the right relation to the rest of what was being broadcast: ALL very much overmodulated. Well, being rather naive in such things, we wrote a letter to the area FCC representative; our "morale officer" signed it, too.

A week or so later, our department head rounded us up and told us we had a meeting with the executive officer. Like in Arlo Guthrie's "Alice's Restaurant," we figured there were only about two things they could want to talk with us about, either to thank us for pointing out the error or to ask for more info. "When we arrived, we discovered there was a third possibility we had not counted upon..." It turned out that the "area FCC representative" was in the Naval Station command, which was separate from our Naval Air Station on the same island. And we had in effect put our CO on report to an officer junior to himself outside his command. They were not happy about this aspect, even though they sincerely appreciated our interest in getting the station to put out a quality signal. We were assigned the task of helping the station solve the problem. Well, when we went to meet with the officer in charge of the station, things were definitely cool: you could about freeze ice in that room. One might surmise that fellow had also had a meeting with the XO which was much less cordial than ours. Even though we clearly had the equipment to calibrate their modulation monitor, no way were they going to let us touch it: it had to go back to AFRTS headquarters for repair and recalibration. And they weren't interested in recommendations for limiters: those, too, would have to come through AFRTS. Fortunately, that whole thing just died a quiet death. The next call I got to see the XO filled me with some trepidation; but it turned out to be _far_ more pleasant and the FM station thing had indeed been forgotten.

73, K7ITM

Date: 11 Apr 94 19:21:40 GMT
From: news-mail-gateway@ucsd.edu
Subject: Info-Hams Digest V94 #396 -Reply
To: info-hams@ucsd.edu

In issue #396, Ed Lieser asked for info on operating repaeaters in Germany while visiting.

It has been 9 years since I moved back home from Germany so I am sure things have changed, particulary in the area of reciprocity and licensing. However, the ARRL should be able to provide a licensing/info package for any western European country you are interested in operating from as well as others. Some are easy, some are not.

The key technical issue to be aware of is most European repeaters are triggered by a tone burst (1750 hz as I recall). If you don't have that capapbility on your rig you won't be able to bring up the machines.

Most of the DL repeaters are in German unless you are near one of the British or American bases (and there are a lot fewer of them now than when I was there).

Have fun and sch?ne Reise!

73,
Charlie
KF2U
ex-DA1OV

Date: 11 Apr 94 13:28:09
From: ihnp4.ucsd.edu!agate!msuinfo!netnews.upenn.edu!mipg.upenn.edu!yee@network.ucsd.edu
Subject: online repeater directory
To: info-hams@ucsd.edu

I write :
># Universal and Free Listing of Repeaters for Radio Amateurs
># The file format (version 0.3) shall be as follows. Consider this file
># 14   input frequency of the repeater (MHz or standard offset: + or -)

John Boteler (bote@access.digex.net) writes:
>Delete +/- now. Going back later to figure out what the "standard"
>offset was meant at the time the info was contributed will be a pain.

Good point! It shall be done for v0.11 of the database. Any good ideas such as this is encouraged and will be incorporated. Any other good ideas for version 0.4 of the file format? Remember to shoot for the sky since it is far easier to make changes now than when this project gains too much momentum (even accounting for the fact that I have reserved a large number of fields for future use).

For some reason, the directories' committee on file format standards

is quite open to my suggestions :)

--
Medical Image Processing Group | Conway Yee, N2JWQ
411 Blockley Hall | EMAIL : yee@mipg.upenn.edu
418 Service Drive | VOICE : 1 (215) 662-6780
Philadelphia, PA 19104-6021 (USA) | FAX   : 1 (215) 898-9145

Date: 11 Apr 1994 18:10:51 GMT
From: nothing.ucsd.edu!brian@network.ucsd.edu
Subject: STOP SENDING HAMS ON USENET CRAP !!!
To: info-hams@ucsd.edu

In article <cZsJkc3w165w@ham.almanac.bc.ca> emd@ham.almanac.bc.ca writes:
>Advocates of this cross posting mode rely on software news packages that
>deliver only one copy of a message to a news server, even if it's posted
>to ten different newsgroups (cross posted, I mean).

Yes, that's the specification and requirement for you to participate in
Usenet. If your software doesn't follow the specifications for
participating in the Usenet news network, you have essentially three
choices:

1) you can fix your software
2) you can stop participating
3) you can live with the problems

     - Brian

Date: 11 Apr 94 23:10:53 GMT
From: news-mail-gateway@ucsd.edu
Subject: subscribe
To: info-hams@ucsd.edu

subscribe info-hams Michael Vannier (N9NNL)
****

Michael W. Vannier, M.D.   71223.235@CompuServe.com
Mallinckrodt Institute of Radiology   mvannier@davey.wustl.edu
Washington University School of Medicine   vannier@mirlink.wustl.edu
510 S. Kingshighway Blvd.   mvannier@brian.wustl.edu
St. Louis, Mo. 63110

****
**

Date: 11 Apr 94 19:44:38 GMT
From: sdd.hp.com!col.hp.com!bryanl@hplabs.hp.com
To: info-hams@ucsd.edu

References <1994Apr11.134530.24696@ke4zv.atl.ga.us>,
<1994Apr11.170233.145109@yuma>, <Co40pn.1Dr@fc.hp.com>
Subject : Re: WWV Antennas

The antenna you are seeing in Ft. Collins is the WWVB 60 KHz vertical.
The horizontal wires are the top hat (capacitive loading). They
also support the vertical.

Date: Mon, 11 Apr 1994 19:22:34 GMT
From: newsgate.melpar.esys.com!syseng1.melpar.esys.com!phb@uunet.uu.net
To: info-hams@ucsd.edu

References <LEVIN.94Apr7125458@medea.bbn.com>,
<HIDEG.94Apr11002550@spsd10b.erim.org>, <2oc39h$1u6@nkosi.well.com>
Subject : Re: Heinous operating techniques (AGAIN!)

On the Northern VA Traffic Net (NVTN) operated on the 147.30+
repeater (Bluemont, VA), the repeater operates in "net" mode which
means that it doesn't ever time out and sends a cw "n" between input
transmissions. The protocol for checkins on this (directed) net is
as follows:

a. NCS calls for net liaisons from other nets first;

b. NCS calls for stations with traffic;

c. NCS calls for stations wishing to check in, usually asking
for mobile stations only first, then others.

Stations checking in usually begin the transmission by saying
"This is" and then UNKEYING THEIR MIKE AND PAUSING MOMEMTARILY TO
LISTEN FOR ANOTHER SIMULTANEOUS CHECKIN. If you hear another station,
you wait until he/she has checked in and then begin again with "This is."
When you say "This is," pause and hear nothing, you then rekey and say
your callsign (preferably phonetically) and the phrase "no traffic" (or
"with traffic," if appropriate, or "liaison for XYZ net with {without}
traffic," or whatever).

EXAMPLE: "This is" (pause) "Kilo four mike sierra golf, no traffic"

     This procedure works extremely efficiently; everyone gets recognized with a minimum of confusion, there are seldom any dual transmissions (unless someone DOESN'T follow the above procedure; occasionally someone says "This is" and DOESN'T pause and listen), and checkins go quickly. There are probably other equally effective methods; I'd like to hear about them.

(|_|) * Paul H. Bock, Jr. K4MSG * Internet: pbock@melpar.esys.com
 | |) * Senior Systems Engineer * Telephone: (703) 560-5000 x2062

   "You can have my bug when you can pry my cold, dead fingers from
    around it....." - anonymous radiotelegraph operator

Date: 11 Apr 1994 18:01:21 GMT
From: ihnp4.ucsd.edu!swrinde!sgiblab!barrnet.net!well!fritza@network.ucsd.edu
To: info-hams@ucsd.edu

References <2nuj02$jh7@oak.oakland.edu>, <LEVIN.94Apr7125458@medea.bbn.com>, <HIDEG.94Apr11002550@spsd10b.erim.org>
Subject : Re: Heinous operating techniques (AGAIN!)

On linked systems, it takes a while (as much a half a second per link) for a carrier on one input to bring up the relay. With a short call like "WT9T," it is _easy_ to lose your entire ID in the time it takes to bring up the link. Personally, I follow the rule key the mike, inhale, then ID; but I don't begrudge the operators who fill the keyup time with noise words.

Calling an extra half-second at the start of a transmission "inefficient," especially when the half-second is needed to make the transmission heard at all, is silly. What were you hoping to do -- accumulate those half-seconds into
a two-week vacation?

The partial-call system advocated in another post would not work in the VHF nets I regularly check into. Net control calls for a suffix range; checkins call in; the net control waits until the call rate goes down, and then reads back the calls he heard. That cycle is repeated until it yields no further call signs, and then is repeated for the next suffix range. In that system, the only transmission most net members make is the single call at checkin; it had better contain a full ID.
--
==========

Fritz Anderson   fritza@well.sf.ca.us
Works, but doesn't speak, for NewMedia, Inc.   317/257-2227
Amateur Radio call WT9T

Date: 11 Apr 94 19:27:23 GMT
From: sdd.hp.com!col.hp.com!fc.hp.com!jayk@hplabs.hp.com
To: info-hams@ucsd.edu

References <Co2MtE.LIA@news.Hawaii.Edu>, <1994Apr11.134530.24696@ke4zv.atl.ga.us>,
<1994Apr11.170233.145109@yuma>
Reply-To : jayk@fc.hp.com
Subject : Re: WWV Antennas

Galen Watts (galen@picea.CFNR.ColoState.EDU) wrote:
: In article <1994Apr11.134530.24696@ke4zv.atl.ga.us> gary@ke4zv.UUCP (Gary
Coffman) writes:
: >>>> But WWV is using just vertical dipoles (not phased, as with WWVH). There
: >
: >That's why they use a vertical dipole pattern.

: WWV near Fort Collins appears to have horizontal dipoles for antennas.
: They're about 100-200 feet off the ground, but they do look horizontal.

: I can see the tower lights from my shack,
: Galen, KF0YJ

I can see horizontal wires running between the towers from my front
yard. A ham friend, that lives even closer, says the horizontal wires
running from tower top to tower top are the top hat for the low (vl?)
frequency antenna. The wire is big enough to see from ~two miles away.

73, Jay K0GU   jayk@fc.hp.com

Date: 11 Apr 94 17:02:32 GMT
From: yuma!galen@purdue.edu
To: info-hams@ucsd.edu

References <940410130354_1@ccm.hf.intel.com>, <Co2MtE.LIA@news.Hawaii.Edu>,
<1994Apr11.134530.24696@ke4zv.atl.ga.us>
Subject : Re: WWV Antennas

In article <1994Apr11.134530.24696@ke4zv.atl.ga.us> gary@ke4zv.UUCP (Gary Coffman)
writes:
>>>> But WWV is using just vertical dipoles (not phased, as with WWVH). There

>
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WWV near Fort Collins appears to have horizontal dipoles for antennas.
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Galen, KF0YJ

End of Info-Hams Digest V94 #405
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